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CLAIMS

- An in-vivo sensing device comprising:
 a first part having a first specific gravity; and
 a second part having a second specific gravity, wherein the first part and the second part are detachable.
 - 2. The in-vivo sensing device according to claim 1 wherein the first specific gravity is greater than the second specific gravity.
 - 3. The in-vivo sensing device according to claim 1 wherein the second specific gravity is less than the specific gravity of a bodily fluid within a body lumen.
- 10 4. The in-vivo sensing device according to claim 1 comprising an imager and an illumination source.
 - 5. The in-vivo sensing device according to claim 1 comprising a timer.
 - 6. The in-vivo sensing device according to claim 1 comprising a filament to temporarily attach the first part to the second part.
- 7. The in-vivo sensing device according to claim 6 wherein the filament is degradable.
 - 8. The in-vivo device according to claim 1 comprising a heating element.
 - 9. The in-vivo sensing device according to claim 1 comprising a magnet, to temporarily attach the first part and the second part by an electromagnetic force.
- 10. The in-vivo sensing device according to claim 1 wherein the first part comprises a photodiode switch.
 - 11. The in-vivo sensing device according to claim 1 wherein the first part comprises a power source.

- 12. The in-vivo device according to claim 1 wherein the first part at least partially covers a viewing window of the second part.
- 13. The in-vivo device according to claim 1 wherein the first part is configured to detach in-vivo.
- The in-vivo device according to claim 1 comprising a receiver for receiving a wireless signal.
 - 15. A method for in-vivo sensing comprising: inserting an in-vivo device into a body lumen comprising:

a floatable part; and

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a non-floatable part wherein the floatable part is temporarily attached to the nonfloatable part;

detaching the non-floatable part from the floatable part; and activating a component in the floatable part.

- 16. The method according to claim 15 wherein the body lumen contains a bulk of liquid.
 - 17. The method according to claim 16 wherein the device is weighted such that it favors a certain orientation.
 - 18. The method according to claim 15 comprising attaching the floatable part to the non-floatable part by an electromagnetic force.
- 20 19. The method according to claim 18 comprising changing the direction of the electromagnetic force.
 - 20. The method according to claim 15 comprising fastening the non-floatable part to the floatable part.

- 21. The method according to claim 15 comprising activating a component in the non-floatable part.
- 22. The method according to claim 15 wherein the component is an imager.
- 23. The method according to claim 15 comprising detecting arrival of the device to the cecum.
 - 24. A method for detaching in-vivo a non-floatable part from an in-vivo sensing device, the method comprising:

inserting the in-vivo device into a body lumen, the in-vivo device comprising: a floatable part; and a non-floatable part;

- sensing a parameter; and detaching the non-floatable part from the floatable part.
 - 25. The method according to claim 24 wherein the floatable part and the non-floatable part are attached with a filament.
 - 26. The method according to claim 24 wherein the filament is heat sensitive.
- 27. The method according to claim 24 wherein the parameter is time sensed by a timer.
 - 28. The method according to claim 24 wherein the parameter is motion sensed by a motion detector.
- 29. The method according to claim 24 comprising melting a filament attaching the floatable part to the non-floatable part.
 - 30. The method according to claim 24 wherein the detaching is initiated by a signal external to the in-vivo sensing device.

31. A system for in-vivo sensing comprising:

an in-vivo sensing device comprising:

a first part having a first specific gravity;

a second part having a second specific gravity, wherein the first part and the second

part are temporarily attached in-vivo; and

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an external receiver to receive wireless signals from the in-vivo device.

- 32. The system according to claim 31 comprising an in-vivo imager.
- 33. The system according to claim 31 wherein the external receiver receives image data via an RF channel.
- 10 34. The system according to claim 31 comprising an external transmitter for transmitting signals to the in-vivo device.
 - 35. The system according to claim 34 wherein the external transmitter is an ultrasound transmitter.
 - 36. The system according to claim 34 wherein the external transmitter is a RF transmitter.
 - 37. The system according to claim 31 comprising a display to display sensed data from the in-vivo sensing device.